arterial pressure by virtue of its peripheral constriction and in spite of a weakening of the left heart. Pituitary extract also causes a fall of pressure throughout the pulmonary circuit because of a decrease in the amplitude of the contractions of the right ventricle. There was no effect upon the expirations except in severe hemorrhages when it sometimes lessened the amplitude of dyspneic respiratory movements. Large doses of chloroform cause a fall of pressure within the pulmonary circuit due to the depression of the heart aided by the diminished respirations. Small doses of chloroform lessen the respiratory movements in hemorrhage and so decrease the pulmonary pressure and hemorrhage without affecting the heart. The nitrites and nitroglycerin cause a general increase in pressure throughout the pulmonary circuit on account of the increased rate and amplitude of the heart, consequently they also cause an increase of the hemorrhage. They may cause a reduction of hemorrhage in the stage when they induce a reduction in the depth of the respiratory movements, which is a symptom of dangerous depression and is accompanied by a weakened systole of the heart. Wiggers concludes by discussing the application of these remedies to cases of pulmonary hemorrhage upon the basis of his experimental work. He says that the chief object of treatment is to promptly reduce the bleeding in the early stage by such drugs as lower the pressure within the pulmonary circuit. He says that this cannot be accomplished by vasomotor drugs such as nitroglycerin or nitrites, and that cardiac depressants, such as chloroform and pituitary extract, must be resorted to. If hemorrhage is continued until the heart is very rapid and the respirations accelerated, deep, and forcible, it is an indication that the heart and bloodvessels no longer react in a typical manner to certain drugs and that the anemia of the cerebral centres is being felt. During this stage it is important that the blood supply of the brain be not reduced by the drugs which check hemoptysis. Hence the drug that combines an ability to elevate systemic arterial pressure and simultaneously to lower that in the pulmonary circuit is the ideal physiological agent to employ during this stage. Wiggers says that, of the drugs investigated, pituitary extract is the only one that possesses his fortunate combination of actions.

Phenylcinchonic Acid in Gout.—GEORGIEWSKY (*Deutsch. med. Woch.*, 1911, xxxvii, 1030) has employed phenylcinchonic acid in the treatment of gout because of its action in markedly increasing the excretion of uric acid in the urine. He says that the majority of patients so treated have shown an improvement in both the subjective and objective symptoms. These results have also been obtained by a number of other observers. The author gives the remedy in doses of 0.5 gram three or four times a day for periods of from five to ten days. No outward effects have been observed from its use.

Indications for the Vaccine Treatment of Disease.—REITER (*Berl. klin. Woch.*, 1911, xlviii, 1235) says that vaccine therapy should never be resorted to in general infections. Local suppurations of all kinds, including local tuberculous infections, are most suitable for vaccine treatment. An autogenous vaccine gives the best results. Autogenous vaccines are absolutely indicated in infections due to the colon bacillus. If the case is urgent, polyvalent vaccine should be used until an autogenous vaccine can be prepared. Reiter believes that it is most important to begin with small doses, and local reactions must be avoided. An interval of at least five days should elapse between injections. Furthermore, this interval should be lengthened if the dose of the vaccine injected is increased.

The Serum Treatment of Influenzal Meningitis.—WALLSTEIN (*Jour. Exper. Med.*, 1911, xiv, 73) states that the injection of virulent cultures of Bacillus influenzæ into the subdural space of several species of lower monkeys is followed by the development of an acute inflammation of the meninges, corresponding in chemical, bacteriological, and pathological effects with influenzal cerebrospinal meningitis in human beings. Experimental influenzal meningitis in the monkey is a lethal disease, which terminates fatally in from thirty-six hours to four days after the inoculation. The injected influenza bacilli produce their effects through multiplication, in the course of which they penetrate from the subdural space into the general blood current, from which they may be recovered during life and at autopsy, as is also true of the spontaneous form of influenzal meningitis in man. By repeated injection over a period of many months of living virulent cultures of Bacillus influenzæ into the goat, an immune serum possessing moderate agglutinating and high opsonic power may be produced, which is capable, when injected into the subdural space, of arresting the progress of an experimental influenza meningitis, and of bringing about recovery in monkeys thus affected. As a result of the serum injection, the influenza bacilli in the meninges are more fully englobed by phagocytes, their number is reduced, their capacity of growth diminished, and the eruption into the blood arrested. Along with these effects go, hand in hand, cessation of the local inflammatory process and progressive amelioration of the symptoms of illness, to be followed usually by rapid restoration of health. In view of the highly fatal character of influenzal meningitis in human beings, the employment of an immune serum by subdural injection is recommended. Undoubtedly it will be necessary to apply the serum early and by repeated injections, by means of lumbar puncture, to secure beneficial results. The early application will, in turn be dependent on prompt bacteriological diagnosis, which can be made, as a rule, by the immediate microscopic examination of the cerebrospinal fluid without the employment of cultural methods. When possible, the microscopic diagnosis should be confirmed by cultural tests.

The Administration of Diphtheria Antitoxin by the Mouth.—CUMBERLEGE (*British Med. Jour.*, 1911, cviii, 2637) sums up the points that, according to his experience, indicate that the administration of diphtheria antitoxin by mouth is superior to the usual method of giving it by injection. He says that results are obtained within a few hours and the action of the antitoxin is little slower if any than when it is given by injection. The dose required is also much smaller. Cumberlege has never given more than 4000 units at one time; his usual practice is to give an initial dose of 2000 units and to repeat this dose if necessary. He says that it is often a good plan to give the antitoxin in small repeated doses every two or four hours. Another advantage of this method is that there is less risk of sudden heart failure that sometimes results from the struggling of children to escape the needle. No patient treated by Cumberlege with this method has shown any evidence of serum sickness, whereas rashes or joint pains were frequently observed when the antitoxin was given by injection.

The Wheat Flour Treatment of Diabetes.—BLUM (*Münch. med. Woch.*, 1911, lviii, 1433) says that when wheat flour is substituted for the oatmeal as given by the von Noorden method, there is no essential difference in the results obtained. The substitution of wheat flour for the oatmeal has many practical advantages, since wheat flour may be given in many different ways, but the methods of administering oatmeal are limited. Blum discusses the theory of the action of oatmeal and wheat meal in diminishing glycosuria. He thinks that the vegetable days serve to relieve the blood of the excess of sugar, and following this the individual's tolerance for starches increases. Another factor of importance is that animal proteid, especially meat, seems in some manner to diminish the power of the body to burn up the carbohydrates. For this reason meat is excluded from the diet when giving an oatmeal or wheat meal cure. Blum says that the milder forms of diabetes respond to this method of treatment more quickly than do the severe forms. It is often unnecessary to precede the meal cure with starvation vegetable days in the mild cases, and in severe cases it may even be dangerous to do so. The vegetable days should always follow the meal days in the severe cases. The mild cases can take large amounts of carbohydrates, usually from 200 to 250 grams, with an equal amount of butter, and in some cases from 50 to 75 grams of vegetable proteid or three or four eggs. He gives moderately severe cases 125 to 150 grams of meal, but allows them as much butter as he does the mild cases. The meal cure is of special value in the treatment of the severe cases with acidosis. In this class of patients care must be used not to give too large quantities of carbohydrates. Blum says that not more than 100 grams should be given at first. After a day or two this amount should be reduced to 50 or 75 grams for a few days, and then the diet should be restricted to green vegetables for a day or two. During the meal days, 125 grams of butter, 50 to 60 grams of vegetable proteid, and the yolks of from four to six eggs are also given. There is no definite rule as to the amount of carbohydrate to be given, but it should be diminished according to the severity of the individual case. Acidosis is much less apt to occur with the meal treatment of severe diabetes, and the glycosuria disappears more rapidly. Blum has treated thirty-five cases with wheat flour in place of oatmeal in the von Noorden diet, and says that the results have been equal if not superior to that obtained with oatmeal.